

our laboratory this has not been necessary because our standard is used rapidly and we make only 100 mls. at a time.

Since our technique was adopted as a routine procedure there has appeared an article entitled, "A Simple and Rapid Quantitative Test for Albumin in Urine," by William G. Exton (*Journal of Laboratory and Clinical Medicine*, vol. X, No. 9, June, 1925, pp. 722-35). This method, according to the report, has "a possible accuracy to within an experimental error of 2 mg., or one part albumin in 50,000 parts of water." The test is based on the principle used in Folin's method of comparing varying degrees of turbidity with known standard solutions of coagulated blood serum proteins accurately prepared in a series of tubes, ranging from 0 to 100 mg. albumin per 100 mls. Exton's clinical albuminometer for comparing the unknown with the standard for rapid reading is described, together with details for preparing the standard. We did not feel that this test was practical for our purposes so cannot report any experiences with it.

In conclusion, we feel that the test here reported and which we have now used for the past year, is one that is technically simple, practical, time-saving, and accurate to a degree well within the range of the requirements for routine clinical laboratory procedures.

Safeguards in Cataract Expression—This paper by John Green, St. Louis (*Journ. A. M. A.*), deals solely with certain points in operative technic. The general preoperative preparation of the patient will not be discussed. It is summarized as follows: 1. Iridectomy under a conjunctival flap heals promptly, without reaction and with little or no danger of infection. 2. In case of immature cataract, opportunity is offered for artificial maturation. 3. Misbehavior by the patient will not imperil the success of the iridectomy and will warn the operator to use extra precautions (akinesia, lid hooks, etc.) at the time of the expression. 4. A realization of the painlessness of the first operation and postoperative period greatly heartens the patient and abolishes his dread of the second operation. 5. The trapezoidal flap possesses all the advantages of the small triangular flap and, in addition, (a) it is thicker and more sturdy; (b) it covers the entire section, and (c) it is held in perfect position under all circumstances by the central Verhoeff stitch and the lateral conjunctival sutures. 6. The steadying of the flap by downward traction on the threads of the Verhoeff stitch enables the operator to complete the section without fear of cutting off the flap. 7. With the Verhoeff suture loosely tied, the flap is drawn into good position and irrigation of the chamber may be carried out with great security. Should vitreous present or prolapse, the immediate tightening of the suture will cause the vitreous to recede or prevent further loss. 8. The toilet of the wound can be carried out leisurely and effectively even after vitreous loss. 9. There is little tendency for the iris to prolapse (no "visible" prolapses in seventy-six cases). 10. Iritis, if it occurs at all, is mild and easily controllable by atropine, heat, and salicylates. 11. Anterior synechiae are very rare. 12. There are a large number of "keyhole" pupils. 13. The secondary membrane is usually very thin and can be sufficiently slit by a single vertical incision (Wheeler). 14. Thick membranes are dealt with by Ziegler's inverted V-shaped dissection.

It is no longer sufficient to name the disease from which the patient suffers and prescribe an appropriate remedy. The physician of today must attempt to analyze the disturbances accurately. He must be prepared to measure the alterations manifesting themselves from day to day, and his treatment must be established on a quantitative basis.—Rufus Cole, *Science*, August 6, 1926.

Special Article

EDUCATION OF THE PUBLIC IN ELEMENTARY MEDICAL SCIENCE

By GEORGE E. COLEMAN *

President American Association for Medical Progress,
Santa Barbara County Branch

THE EDITOR—The American Association for Medical Progress is a favorably known democratic organization, made up largely of intelligent nonmedical citizens, and conducted with the praiseworthy purpose of making suitable facts about the promoting of health, the prevention and treatment of disease, and in general the methods, purposes and practices of educated physicians, better and more widely understood; to assist in combatting the effect of ignorance and the activity of quacks, cultists and sciosophists of all classes in their efforts to capitalize sickness to their own advantage.

The Santa Barbara County branch of the Association, of which Mr. Coleman is president, is a particularly and effectively active one, due doubtless largely to capable activities of its president with the co-operation and support of honorary president, Henry S. Pritchett; honorary vice-presidents, Judge R. B. Canfield, George S. Edwards, Seth A. Keeney, George Owen Knapp, and C. A. Storke; a lay advisory board of F. F. Peabody (chairman), Frederick C. Clements, George W. Clyde, Col. Charles H. Graves, R. W. Hersey, Bernard Hoffman, Mrs. Michel Levy, Mrs. Frances B. Linn, Miss Annie McCaughey, Paul E. Stewart; and a medical advisory board made up of ten physicians of the county.

Mr. Coleman's article, illustrated by reproductions—some of them advertisements in the newspapers of Santa Barbara—is published that physicians may more fully realize and appreciate the strong ally they have in promoting and protecting the health of our citizens.

Even our good friend Mr. Coleman, whom physicians honor and respect, misses the point in medical ethics that encourages individual physicians who are in the practice of medicine to issue their newspaper and similar health information in the name of their County Medical Society, so as to avoid a misunderstanding of motives both by the public and other physicians, which experience shows to be otherwise the unavoidable and invariable result. The apathy of physicians also is hardly as bad as indicated because the majority of periodicals and hundreds of newspapers are publishing medical information, while the A. M. A. publishes a popular monthly magazine devoted exclusively to authoritative health information, and a group of ethical doctors of California also publish monthly a popular health magazine.

However, none of these facts detracts from the value of Mr. Coleman's message, nor do they make the added work of the American Association for Medical Progress less necessary.

THIS article is prompted by a desire to further inform physicians of the effort the organization I represent is making to give reliable medical information to the public. I shall also endeavor to make clear the imperative necessity for a more active participation by the profession as a whole in the work along these lines that is being done by laymen.

The Santa Barbara County Branch of the American Association for Medical Progress has been in active operation considerably less than a year. It has received favorable comment in CALIFORNIA AND WESTERN MEDICINE and

*George E. Coleman (119 Hot Springs Road, Santa Barbara, California). B. S. University of California, 1891. Graduate study: At Pasteur Institute, Paris; Metchnikoff's laboratory; Hospital Santa Maria Nuova, Florence, Italy; private laboratory at home in Santa Barbara. Scientific organizations: Society of American Bacteriologists, Santa Barbara Natural History Society, National Geographic, president and organizer of local branch American Association for Medical Progress. Present appointments: Research Associate Hooper Foundation for Medical Research, University of California Medical School, San Francisco. Publications: Articles in *Ann. de l'Inst. Pasteur*, *Jour. of Infectious Diseases*, *Better Health* and newspapers; about fifty columns of latter last year; instructive articles for laymen in elementary medical science.

the Journal of the American Medical Association. While giving full credit to the very effective work of other organizations, I feel that physicians should know of the sustained effort along these lines we are making in Santa Barbara County. Our residence in southern California, the happy hunting ground of quackery and cultism, makes the menace of epidemics seem very real to us.

Concisely stated the aims of our Association are:

1. To encourage and aid all research and humane experimentation for the advancement of medical science.
2. To inform the public of the truth concerning the value of scientific medicine to humanity and to animals.
3. To resist the efforts of the ignorant or fanatical persons or societies constantly urging legislation dangerous to the health and well-being of the American people.

Our organization with a present membership of 256 has the hearty endorsement of the County Medical and Dental societies as well as the City and County Health authorities. Our honorary officers and our lay and medical advisory boards are made up of leaders in medical and civic activities in this community. We have maintained close contact with various agencies devoted to public education in health matters, including our parent national organization, of which the writer is a director. During the past nine months we have published about fifty-five columns of medical information in local newspapers. About half of this appeared as answers to questions in our Medical Progress Column. The other half was written by me principally on the cause and prevention of disease. I have also sent out reprints of addresses which I have delivered before the Rotary, Exchange, University Clubs, etc., as well as at other meetings. As a laymen's organization we have not felt strictly bound by the ethics of physicians, so in addition to reading matter we made formerly several announcements in the advertising sections of the newspapers. This was later discontinued as its value was questionable from an educational as well as from a financial standpoint. Some of these announcements are reproduced in this article.

The AMERICAN ASSOCIATION for MEDICAL PROGRESS

favors

Humane Animal Experimentation

By this method only can a cure for Tuberculosis, Cancer or Animal Diseases be found.

THE ANTI-VIVISECTIONISTS WOULD PERPETUATE FOREVER THESE DISEASES OF MAN AND DUMB ANIMALS.

Your membership will help promote public health and enlightenment.

I have made a special appeal to those uninformed and prejudiced members of humane societies, who happen to be genuine lovers of animals, that they may be brought to realize the necessity for animal experimentation in medical research. The results of the investigation by eminent bacteriologists, as reported by the American Distemper Committee, of this disease in dogs has been given the widest publicity by us. This because of the importance of

The American Association for Medical Progress

THIS is an organization of laymen whose object is to disseminate as widely as possible authentic information regarding the fundamentals of modern medicine. Information as to the cause, prevention and cure of disease in man and animals depends upon a careful check on research. And experimental research depends largely upon the humane use of animals. This very factor of humane animal experimentation has accomplished the following great blessings for mankind and dumb animals:

It has found the way to prevent anthrax, Texas fever and hydrophobia.

It has rendered vaccination harmless and smallpox entirely preventable.

It has given us anesthetics and eliminated surgical infections.

It has given diabetes, through insulin, a new lease of life.

It makes the prevention and cure of scarlet fever almost a certainty.

It has cut the death-rate of diphtheria over 80%.

It gave us most of our efficient methods of sanitation.

It has laid the way to the abolition of yellow fever and malaria.

It has made typhoid no longer a community danger.

It has made possible correct diagnosis and permanent cure of syphilis.

It has made possible the prevention of tetanus (lock-jaw).

Only by means of humane animal experimentation can any hope for the cures of cancer, tuberculosis, infantile paralysis or animal diseases be found. Quackery is a menace—Scientific medicine has no "secret remedies." Continuous education can greatly reduce the failure of others to understand rightly the scientific attitude. We need the help of every intelligent citizen in the community.

Your membership will help promote public health and enlightenment.

the results attained insofar as they may have a bearing on future research in human and animal diseases and for its value in proving the necessity for the humane use of animals in the search for new knowledge. According to an article which recently appeared in the "Christian Science Monitor," it was announced at a meeting of the Anti-Vivisection Society of Los Angeles that "the society is planning to send an anti-vivisection car on a tour of the state as part of a campaign against vivisection and inoculation, following a plan which Doctor Hadwen described as having been successful in England." It is impossible to tell to what extent our efforts as a whole, thus far, have been justified, but the vote of this community on the proposed anti-medical legislation to come up in November will tell the tale.

Without outstripping the bounds of modesty I feel that I may consider myself as a sort of liaison officer between laymen and the medical profession in this community. As a research worker in bacteriology and allied subjects and a constant reader of many medical journals, including the journal of the A. M. A., for the past sixteen years, I also feel that, without offense, I may ask you for a hearing concerning the attitude of some physicians toward the active participation by members of the profession in the education of the public in elementary medical methods. The necessity for this has been stressed repeatedly by prominent physicians and has the endorsement of the A. M. A., the C. M. A., and other official medical organizations. I earnestly call the attention of every physician in this state to the very illuminating article by Wendell C. Phillips, president of the A. M. A. (Jour. A. M. A. 86:17, p. 1259).

For years before the local branch of the American Association for Medical Progress was organized I have been fighting battles for scientific medicine and in a section of the state where it has many enemies. If they are not to increase, the profession as a whole will have to arouse itself from its apathy. Anti-science or sciosophy, as Doctor Jordan calls it, is rampant throughout the country and the discrediting of the medical profession particularly is a common indoor sport where groups of really intelligent people, not necessarily cultists, often discuss your failures.

The "Medical Trust," state medicine, corporation prac-

The American Association for Medical Progress

This Is An Organization of Laymen

Whose object is to disseminate as widely as possible authentic information regarding the fundamentals of modern medicine. Information as to the cause, prevention and cure of disease in man and animals depends on a careful check on research. And experimental research depends largely on the humane use of animals.

Full use of our best scientific knowledge is possible only with the support and co-operation of the public. Such co-operation depends entirely upon an appreciation of what scientific medicine and research mean.

Ignorance is a menace to medical progress and to the health of the people. By its inability to under-

stand the scientific attitude, it opposes medical knowledge that can be gained only by the experimental method. This can be remedied by continuous education.

A membership in this Association will cost only Two Dollars annually. We need the help of every intelligent citizen in the community.

Read the "Medical Progress" Column in the "News" Every Saturday Night

Your membership will help promote public health and enlightenment

tice and, of course, unfortunate individual experiences are the usual themes. Seemingly plausible "body mechanics," "expert dietitians," and religious healers, are rapidly gaining the confidence of educated but unthinking people. You have only yourselves to thank for this. You have lost the outer ramparts in the battle for a single Board of Medical Examiners in California as well as in other states and now they are about to batter at the very doors of your hospitals.

Better support will have to be given to those fearless ones among you, and there are several in Santa Barbara who are working for the good of all by health talks and by articles in the lay press. There is no more reason why information concerning the physiological processes of the human and animal body should not be authoritatively given to laymen than astronomical or other scientific knowledge. The New York "Evening Post," in a convincing article, has truthfully stated that "the science of medicine as far as laymen are concerned is the most tongue-tied of all the learned professions."

If you could only realize as I do the avidity of the public for reliable medical information you would discard your ultra-conservatism and aloofness, remodel your ethics to meet the exigencies of a menacing situation, and give the public what it wants and above all what it needs. If you do not do this, plausible quackery will increase and the high ideals of public service which have been gained by the profession after long years of striving, will suffer. Already in your ranks standards are being lowered and reputable physicians are found who are willing to use such "secret remedies" as Koch's Cancer Cure, of which I know only one thing—that its formula has not been given to the profession, and that is enough. By taking the public into your confidence, by establishing a closer contact with your patients, by explaining to them the knowledge and ideals upon which your professional standards have been founded, you will enhance your usefulness and extend your activities for human welfare in general and your own in particular.

I have no quarrel with the medical profession. Though lacking a medical degree, as a medical scientist I feel in my heart and in my sympathies as one of you. I therefore urge you to give careful consideration to the present hostile and dangerous attitude of large numbers of our population and to co-operate more widely with the efforts of those physicians and laymen with medical knowledge

who are fighting the battle of scientific medicine. It is your fight, and if it is to be won, the control of the tactical methods for winning it should be kept largely in your own hands and not relegated almost entirely to well-meaning but often uninformed laymen.

Developing the Nursing Instinct in Girls—The nursing instinct is as universal among normal girls as is the policeman or soldier instinct among boys, but its intelligent development is of far more recent origin.

From time immemorial our boys have had encouragement and help in promoting and fixing this military instinct, but it remained for the Red Cross to initiate and develop a nation-wide promotion of the far more useful spirit of nursing among girls. This they have done and are doing through a variety of highly commendable methods which are being improved and made more practical and useful.

Nowhere is this instruction being more wisely and systematically promoted than on the Pacific Coast under the leadership of Dorothy Ledyard, R. N. (Assistant National Director Nursing Service, A. R. C.).

A few quotations from teachers in home nursing courses and from pupils form interesting reading which older heads may well ponder:

1. "The students of the Home Nursing Class have a great deal more interest in having good health and are glad to co-operate with us when we suggest they see a doctor about eyes, ears and any other ailments of a minor nature. Before, unless they were sick in bed, we could not get them to see that small ailments should have the attention of a doctor."

2. "Nineteen students have signed up for the Red Cross Course in Home Hygiene and Care of the Sick. So far we have had the Chapter on Bed-Making, Cause and Prevention of Disease, and the Care of Patients with Communicable Disease. It is a very interesting and interested group. The county nurse is planning to convert the room of one of the girls into a sick chamber, with Mary isolated as a scarlet fever patient. The students are looking forward to helping with this clinic in connection with their class work, which takes three hours a week, meeting three times a week. The pupils are required to spend two hours a week doing infirmity duty. Several of the girls are interested in nursing."

3. Two young high school misses express themselves as follows concerning the Red Cross Home Hygiene Course: "I am not yet certain, but I think I shall be a nurse. If I do, hygiene will help me a great deal, for I shall have had the foundation for the work in the hospital. It would be a great help to already know how to make a bed correctly, to give a bath in bed, and the great many other things which we learn to do."

"I intend to go to college, then some time have a home of my own. Home nursing will help me while I'm in college away from mother, to look out for myself. In my home I'll know best how to care for the home and persons in it."

4. "The nurse, this month, directed her efforts mainly to making home calls on parents whose children needed physical defects corrected immediately, hoping to persuade them to have the necessary work done during the Easter vacation. Her efforts were rewarded by eight children having tonsils and adenoids removed, ten having dental work done and two being fitted with glasses."

5. "This week we begin our work bathing babies in the home. Four mothers have given permission for the girls to come to the home and give baby a bath under my personal supervision. Much excitement among the girls."

6. "Four classes of mothers were held during the month. One of the discontinuing members reported having had her small son operated on for diseased tonsils and adenoids. Class discussion of children's defects had made her realize the possible seriousness of the child's condition."

Excellent work. The only unsound note is contained in reports which show zeal carried too far, and about which we refrain from comment.

The rattlesnake seldom strikes without warning; smallpox always.—Naullaqui.